

(1)(a).1 Appropriate and Relevant Labor Categories [L.27, (c)
(2)(a)]

(1)(a).1.1 *Descriptions of Qualifications Required [L.27, (c)(2)
(a)]*

Administrative Specialist

Education and General Experience: High school diploma. Must possess word processing and general office skills. Requires a minimum of one year of office experience in an information technology environment. **Functional Responsibility:** Performs high level of secretarial work under general supervision. Types and proofreads. Maintains filing system. Answers telephones and routine requests, schedules meetings, mail distribution, and makes travel arrangements.

Applications Programmer-Intermediate

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with one year of experience. **Functional Responsibility:** Participates in the design of software tools and subsystems to support reuse and domain analysis. Assists in interpreting software requirements and design specifications to code, and integrates and tests software components.

Applications Programmer-Senior

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline. Five years experience - three years specialized as an applications programmer on large-scale database management systems. **Functional Responsibility:** Analyzes functional business applications and design specifications for functional activities. Prepares required documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met.

Applications Programmer-Junior

Education and General Experience: Associates degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with one year of experience. **Functional Responsibility:** Participates in the design of software tools and subsystems to support reuse and domain analysis. Assists with design specification and code.

Applications Systems Analyst/Programmer-Intermediate

Education and General Experience: Bachelor's degree with 3 years of experience. **Functional Responsibility:** Formulates and defines system scope and objectives through research and fact-finding to develop specifications or modify moderately complex information systems. Designs, codes, tests, debugs, documents, and maintains programs.

Applications Systems Analyst/Programmer-Senior

Education and General Experience: A Bachelors degree with 6 years of experience. **Functional Responsibility:** Formulates and defines system scope and objectives and modifies procedures to solve complex problems. Designs, codes, tests, debugs, and documents those programs. Competent to work at the highest technical level. May be responsible for completion of a phase of a project.

Applications Systems Analyst/Programmer-Junior

Education and General Experience: Associates degree or student obtaining a Bachelor's degree with 1 year of experience. **Functional Responsibility:** Assists in formulation and definition of system scope and objectives through research and fact finding to develop specifications or modify moderately complex information systems. Assists with the designing, coding, testing, debugging, documenting and maintaining of programs.

Applications Systems Analyst-Junior

Education and General Experience: Student majoring in Computer Science, Information Systems, Engineering, Business, or other technically related discipline. **Functional Responsibility:** Assists in research and fact-finding to develop specifications or modify information systems. Analyzes and revises existing system logic difficulties and documentation as necessary. May use CASE tools.

Applications Systems Analyst-Intermediate

Education and General Experience: Bachelors degree with 1 year of experience. **Functional Responsibility:** Formulates and defines system scope and objectives through research and fact-finding to develop or modify moderately complex information systems. Analyzes and revises existing system logic difficulties and documentation as necessary. May use CASE tools.

Applications Systems Analyst-Senior

Education and General Experience: Bachelors degree with 5 years of experience. **Functional Responsibility:** Formulates and defines system scope and objectives based on user needs. Devises or modifies procedures to solve complex problems. Analyzes and revises existing system logic difficulties and documentation as necessary. May use CASE tools.

Business Analyst-Junior

Education and General Experience: Associates degree or applicable training certificates. **Functional Responsibility:** Prepares financial and business related analysis and research in such areas as financial and expense performance, rate of return, depreciation, working capital, and investments. Assists in the development of business policies, conducts special financial and business related studies.

Business Analyst-Intermediate

Education and General Experience: Bachelor's degree or applicable training certificates with two years experience of increasing complexity in the last three years. **Functional Responsibility:** Prepares financial and business related analysis and research in such areas as financial and expense performance, rate of return, depreciation, working capital, and investments. Assists in the development of business policies, conducts special financial and business related studies.

Business Analyst-Senior

Education and General Experience: Bachelor's degree or applicable training certificates with five years experience of increasing complexity in the last five years. **Functional Responsibility:** Prepares financial and business related analysis and research in such areas as financial and expense performance, rate of return, depreciation, working capital, and investments. Assists in the development of business policies, conducts special financial and business related studies.

Business Process Consultant-Junior

Education and General Experience: Bachelor's degree with three years of intensive and progressive experience. **Functional Responsibility:** Provide consulting to agency heads, directors, and senior managers on quality improvement, ISO9000 certification, business process reengineering and strategic implementation of information technology techniques. Designs, organizes, leads, and conducts executive level workshops, benchmarking, and surveys.

Business Process Consultant-Intermediate

Education and General Experience: Bachelor's degree with six years of intensive and progressive experience. **Functional Responsibility:** Provide consulting to agency heads, directors, and senior managers on quality improvement, ISO9000 certification, business process reengineering and strategic implementation of information technology techniques. Designs, organizes, leads, and conducts executive level workshops, benchmarking, and surveys.

Business Process Consultant-Senior

Education and General Experience: Bachelor's degree with ten years of intensive and progressive experience. **Functional Responsibility:** Provide consulting to agency heads, directors, and senior managers on quality improvement, ISO9000 certification, business process reengineering and strategic implementation of information technology techniques. Designs, organizes, leads, and conducts executive level workshops, benchmarking, and surveys.

Business Systems Analyst-Junior

Education and General Experience: Bachelor's degree or applicable training certificates with 2 years experience of increasing complexity in the last five. **Functional Responsibility:** Assists in formulating and defining systems scope and objectives through research and fact-finding combined with a basic understanding of business systems and industry requirements. Includes analysis of business and user needs, documenting requirements, and revising existing system logic.

Business Systems Analyst-Intermediate

Education and General Experience: Bachelor's degree or applicable training certificates with 5 years experience of increasing complexity in the last five. **Functional Responsibility:** Assists in formulating and defining systems scope and objectives through research and fact-finding combined with a basic understanding of business systems and industry requirements. Includes analysis of business and user needs, documenting requirements, and revising existing system logic.

Business Systems Analyst-Senior

Education and General Experience: Bachelor's degree or applicable training certificates with eight years experience of increasing complexity in the last ten years. **Functional Responsibility:** Formulates and defines systems scope and objectives based on both user needs and a good understanding of applicable business systems and industry requirements. Includes analysis of business and user needs, documentation of requirements, and translation into proper system requirement specifications.

Client/Server Database Analyst/Programmer-Junior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with up to 2 years experience. **Functional Responsibility:** Assists in the design, implementation, and maintenance of databases in a

client/server environment. Competent to work on phases of client/ server database administration such as writing and maintaining simple systems and programs.

Client/Server Database Analyst/Programmer-Intermediate

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with three to five years experience. **Functional Responsibility:** Designs, implements, and maintains moderately complex databases in a client/server environment with respect to access methods, access time, validation checks, and statistical methods. Includes maintenance of database dictionaries and integration of systems through client/server database design.

Client/Server Database Analyst/Programmer-Senior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with six to nine years experience. **Functional Responsibility:** Designs, implements, and maintains complex databases in a client/server environment with respect to access methods, access time, validation checks, organization, security, documentation, and statistical methods. Includes maintenance of database dictionaries, overall monitoring and standard procedures, and integration of systems through client/server database design.

Cyber Security Analyst -Junior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with up to 2 years experience. **Functional Responsibility:** Assists in developing technical solutions including: information operations and analysis related to security intrusion analysis, systems & vulnerabilities, network security, advanced analytic tools, data visualization techniques. Competence in computer security, computer networking with TCP/IP, and network operating systems. Experience in computer network defense and in-depth technical knowledge with intrusion detection systems.

Cyber Security Analyst -Intermediate

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with three to five years experience. **Functional Responsibility:** Develops technical solutions including: information operations and analysis related to security intrusion analysis, systems & vulnerabilities, network security, advanced analytic tools, data visualization techniques. Competence in computer security, computer networking with TCP/IP, and network operating systems. Experience in computer network defense and in-depth technical knowledge/mastery with intrusion detection systems.

Cyber Security Analyst -Senior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with six to nine years experience. **Functional Responsibility:** Develops technical solutions including: information operations and analysis related to security intrusion analysis, systems & vulnerabilities, network security, advanced analytic tools, data visualization techniques. Competence in computer security, computer networking with TCP/IP, and network operating systems. Experience in computer network defense and in-depth technical knowledge/mastery with intrusion detection systems.

Data Architect

Education and General Experience: Bachelor's degree or applicable training certificates with three to five years experience. **Functional Responsibility:** Activities includes data design, database architecture, metadata and repository creation. Translates business needs. Defines, designs, and builds dimensional databases. Evaluates reusability of current data. Conducts data cleaning to rid the system of old, unused, or duplicate data. Reviews object and data models and the metadata repository to structure the data for better management and quicker access.

Data Security Analyst-Junior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with one to three years experience. **Functional Responsibility:** Performs all procedures ensure the safety of IS assets. Ability to assist with the development of IT security standards and procedures. Knowledge of IT industry trends and emerging technologies.

Data Security Analyst-Intermediate

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with three to five years experience. **Functional Responsibility:** Performs all procedures ensure the safety of IS assets. Ability to develop IT security standards and procedures. Knowledge of IT industry trends and emerging technologies.

Data Security Analyst-Senior

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with six to nine years experience. **Functional Responsibility:** Performs all procedures necessary to ensure the safety of IS assets. Conducts accurate evaluation of the level of security required. Must be able to weigh business needs against security concerns and articulate issues to management.

Data Warehousing Programmer-Junior

Education and General Experience: An Associate's degree with two years of experience. **Functional Responsibility:** Assists in designing and constructing data repositories. Applies an enterprise-wide set of disciplines for the planning, analysis, data refinement, design and construction of information systems. Develops analytical and computational techniques for problem solutions. Performs strategic systems planning and business information planning.

Data Warehousing Programmer-Intermediate

Education and General Experience: Bachelor's degree with four years of experience. **Functional Responsibility:** Designs and constructs data repositories. Applies an enterprise-wide set of disciplines for the planning, analysis, data refinement, design and construction of information systems. Develops analytical and computational techniques for problem solutions. Performs strategic systems planning and business information planning.

Data Warehousing Programmer-Senior

Education and General Experience: Bachelor's degree with six years of experience. **Functional Responsibility:** Designs and constructs data repositories. Applies an enterprise-wide set of disciplines for the planning, analysis, data refinement, design and construction of information systems. Develops analytical and computational techniques

for problem solutions. Performs strategic systems planning and business information planning.

Database Administrator

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Participates in the design, creation, and maintenance of computerized databases. Responsible for quality control and auditing of databases to ensure accurate and appropriate use of data. Works directly with users to resolve data conflicts and inappropriate data usage. Directs the maintenance and use of the corporate data dictionary.

Database Analyst/Programmer-Junior

Education and General Experience: Bachelor's degree with two years of experience. **Functional Responsibility:** Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications.

Database Analyst/Programmer-Intermediate

Education and General Experience: Bachelor's degree with five years of experience. **Functional Responsibility:** Designs, implements, and maintains moderately complex databases. Includes maintenance of database dictionaries and integration of systems through database design. Competent to work on most phases of database administration.

Database Analyst/Programmer-Senior

Education and General Experience: Bachelor's degree with seven years of experience. **Functional Responsibility:** Designs, implements, and maintains complex databases with respect to JCL, access methods, access time, device allocation, validation checks, organization, protection and security, documentation, and statistical methods. Includes maintenance of dictionaries, monitoring of standards, and integration of systems through database design.

Database Manager

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline. **Functional Responsibility:** Manages the development of data base projects. Plans and budgets staff and data base resources. Prepares and delivers presentations on data base management systems (DBMS) concepts.

Disaster Recovery Analyst

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Assists in the coordination and establishment of disaster recovery programs and business resumption planning across mainframe and client server platforms. Coordinates and monitors simulation testing across all platforms. Aids in investigation, planning, documentation, implementation, and maintenance of disaster recovery plans.

Documentation Specialist

Education and General Experience: Associate's degree with three years experience. **Functional Responsibility:** Gathers, analyzes, and composes technical information. Conducts research and ensures the use of proper technical terminology. Translates

technical information into clear, readable documents to be used by technical and non-technical personnel.

End User Computing Specialist

Education and General Experience: Bachelor's degree with two years experience.

Functional Responsibility: Assists in the evaluation of business problems, evaluates and recommends vendor packages, and implements required software. Assists in the evaluation of personnel end-user computing packages and equipment as well as in the implementation and testing of prototypes. Consults with client area management and staff regarding PC and LAN systems and equipment problems or malfunctions and recommends solutions.

Enterprise Architect

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Acts independently to provide business and/or technical IT consulting support to strategic units and customer enterprises. Works with executives in the customer organization to formulate enterprise-wide business and/or technical IT product and/or service strategies. Develops and applies consulting methodologies, business models and organizational behavior models to conceptualize methods to apply business and/or technical IT products and services as strategic assets. Supports and participates in the conceptualization and development of ' technology policy, methodologies, models, techniques and strategies.

Graphics Specialist

Education and General Experience: A high school diploma and a minimum of two years experience developing graphic/artistic presentations for publications and documents. **Functional Responsibility:** Creates publication cover designs, hand drawn and computer-generated illustrations and graphics including tables, charts, logos and other artwork. Performs page layout for technical documents, newsletters, brochures, posters and other types of documents. Produces camera-ready copy in hard copy and/or electronic format for printing.

Help Desk Coordinator

Education and General Experience: Bachelor's degree or applicable training certificates from accredited institutions with three to five years of experience. **Functional Responsibility:** Responds to and diagnoses problems through discussions with users. Includes problem recognition, research, isolation, and resolution steps. May involve use of problem management database and help desk systems.

Help Desk Support Service Specialist

Education and General Experience: High school graduate. **Functional Responsibility:** Provides second-tier support to end users for either PC, server, or mainframe applications and hardware. Handles problems that the first-tier of help desk support is unable to resolve. May interact with network services, software systems engineering, and/or applications development to restore service and/or identify and correct core problem. Escalates more complex problems.

Information Assurance Specialist-Junior

Education and General Experience: Bachelor's degree in computer science, engineering, business administration, or other related scientific or technical disciplines. **Functional Responsibility:** Establishes and satisfies system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands.

Coordinates with customer organization to establish and define programs, resources, and risks.

Information Assurance Specialist-Intermediate

Education and General Experience: Bachelor's degree in computer science, engineering, business administration, or other related scientific or technical disciplines.

Requires an expert understanding of security policy advocated by the U.S. Government.

Functional Responsibility: Establishes and satisfies complex system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands. Coordinates with the customer organization to establish and define programs, resources, and risks. Provides guidance and direction to other professionals, acts in a consulting and/or advisory capacity, coordinates resolution of highly complex problems and tasks.

Information Assurance Specialist-Senior

Education and General Experience: Bachelor's degree in computer science, engineering, business administration, or other related scientific or technical disciplines.

Requires an expert understanding of security policy advocated by the U.S. Government

with ten to fifteen years of experience. **Functional Responsibility:** Establishes and satisfies complex system-wide information security requirements based upon the analysis of user, policy, regulatory, and resource demands. Coordinates with customer organization to establish and define programs, resources, and risks. Provides guidance and direction to other professionals, acts in a consulting and/or advisory capacity, coordinates resolution of highly complex problems and tasks.

IS Administration and Planning Manager

Education and General Experience: Bachelor's degree in computer science, engineering, business administration, or other scientific or technical disciplines with six to ten years of experience. **Functional Responsibility:** Directs the preparation, review, and consolidation of information systems budgets and business plans. Ensures adherence to budgets and business plans through periodic review of financial reports and capital appropriation requests. May be responsible for hardware contract administration and/or outsourcing contract administration and service levels including negotiation of contract provisions, interface with legal department, and maintenance of appropriate documentation.

IV&V Specialist (Data Validation/Standardization Specialist)-Junior

Education and General Experience: Associate's degree in Computer Science, Information Systems, Engineering, Business, Physical Science with three years experience. **Functional Responsibility:** Provides technical support in the evaluation of prime objectives names, data elements, and other objects. Evaluated proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the values of object attributes and domains are accurate and correct. Ensures that the proposed objects are consistent with data and process models.

IV&V Specialist (Data Validation/Standardization Specialist)-Intermediate

Education and General Experience: Associate's degree in Computer Science, Information Systems, Engineering, Business, Physical Science with five years or Bachelor's degree in Computer Science with two years experience. **Functional Responsibility:** Provides technical support in the evaluation of prime objectives names,

data elements, and other objects. Evaluated proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the values of object attributes and domains are accurate and correct. Ensures that the proposed objects are consistent with data and process models.

IV&V Specialist (Data Validation/Standardization Specialist)-Senior

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, Physical Science with seven years experience. **Functional Responsibility:** Provides technical support in the evaluation of prime objectives names, data elements, and other objects. Evaluated proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the values of object attributes and domains are accurate and correct. Ensures that the proposed objects are consistent with data and process models.

Network Engineer-Junior

Education and General Experience: Bachelor's degree in electrical engineering, computer science, or a related engineering or science discipline with three to five years of experience. **Functional Responsibility:** Assists with the installation and support of network communications. Follows standard practices and procedures in analyzing situations involving readily identifiable problems. Assists in the planning of large scale systems projects.

Network Engineer-Intermediate

Education and General Experience: Bachelor's degree in electrical engineering, computer science, or a related engineering or science discipline with six to nine years of experience. **Functional Responsibility:** Oversees the purchase, installation, and support of network communications. Works on problems of diverse scope where analysis of situation requires evaluation and judgment. Assists in the planning of large scale systems projects. Requires thorough knowledge of LAN/WAN systems, networks, and applications

Network Engineer-Senior

Education and General Experience: Bachelor's degree in electrical engineering, computer science, or a related engineering or science discipline with ten to fifteen years experience. **Functional Responsibility:** Manages the purchase, installation, and support of network communications. Responsible for evaluating current systems. Works on complex problems where analysis of situation requires in-depth evaluation of various factors. Plans large scale systems projects. Requires expert knowledge of LAN/WAN systems, networks, and applications.

Physical Security Specialist

Education and General Experience: Bachelor's degree or three years experience in an equivalent field. **Functional Responsibility:** Responsible for processing and maintaining accountability of classified documents, implementing physical security measures, oversight and daily interface with guard management. Oversees all day-to-day activities involving access control and personnel security (including visitor control), building access key or badge issue/accountability, and special events for both classified and unclassified facilities. Participates in physical security risk assessments, and perform other duties as required.

Procurement Specialists-Junior

Education and General Experience: Associates degree with one year of contract experience. **Functional Responsibility:** Oversees aspects of the technology purchasing function. Partially manages purchasing processes such as placing orders, tracking orders, and reconciling invoices. Ensures proper approval has been obtained for equipment purchases. Obtains and evaluates quotes from vendors.

Procurement Specialists-Intermediate

Education and General Experience: Bachelor's degree with three years experience or an Associates degree with five years of contract experience. **Functional Responsibility:** Oversees aspects of the technology purchasing function. Partially manages purchasing processes such as placing orders, tracking orders, and reconciling invoices. Ensures proper approval has been obtained for equipment purchases. Obtains and evaluates quotes from vendors.

Procurement Specialists-Senior

Education and General Experience: Bachelor's degree with five years of contract experience. **Functional Responsibility:** Oversees the technology purchasing function. Plans and coordinates IT related equipment installations, moves, additions, and changes. Manages purchasing processes such as placing orders, tracking orders, and reconciling invoices. Plans, organizes, and coordinates all technology purchasing efforts. Establishes and maintains system for moving assets as they are distributed.

Project Control Specialist

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business or other related discipline with four years experience. **Functional Responsibility:** Directs budgeting, manpower and resource planning, and financial reporting. Performs complex evaluations of existing procedures, processes, techniques, models, and/or systems related to management problems or contractual issues. Develops work breakdown structures, prepare charts, tables, graphs, and diagrams to assist in analyzing problems.

Project Manager

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, Physical Science, or other technically related discipline with six years experience. **Functional Responsibility:** Supports a large, complex task order (or a group of task orders). Assists the Program Manager in working with the Contracting Officer (CO), the Contracting Officer's Representative (COR), the task order level COR(s), government management personnel and customer agency representatives. Responsible for the overall management of the specific task order(s) and insuring that the technical solutions and schedules in the task order are implemented in a timely manner. Performs enterprise wide horizontal integration planning and interfaces to other functional systems.

QA Analyst-Junior

Education and General Experience: Bachelor's degree with two years experience. **Functional Responsibility:** Provides technical and administrative direction software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, review of program documentation to assure government standards/requirements are adhered to, and for progress in accordance with

schedules. Coordinates with the Project Manager and/or Quality Assurance Manager to ensure problem solution and user satisfaction.

QA Analyst-Intermediate

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Provides technical and administrative direction software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, review of program documentation to assure government standards/requirements are adhered to, and for progress in accordance with schedules. Coordinates with the Project Manager and/or Quality Assurance Manager to ensure problem solution and user satisfaction.

QA Analyst-Senior

Education and General Experience: Bachelor's degree with six to nine years experience. **Functional Responsibility:** Carries out procedures to ensure that all information systems products and services meet organization standards and end-user requirements. Performs and leads tests of software to ensure proper operation and freedom from defects. May create test data for applications. Devises improvements to current procedures and develops models of possible future configurations.

Software Architect

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with five years experience. **Functional Responsibility:** Works independently designing and developing new software products or major enhancements to existing software. May lead a large development team in the design of highly complex software systems. Acts as highest level technical expert, addressing problems of systems integration, compatibility, and multiple platforms.

Software Systems Engineer-Junior

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with two years experience. **Functional Responsibility:** Works from specifications to assist in developing and modifying operating software programming applications. Assists with design, coding, benchmark testing, debugging, and documentation. May customize purchased applications and assist in maintaining program libraries and technical manuals.

Software Systems Engineer-Intermediate

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with five years experience. **Functional Responsibility:** Specialized experience in analysis and design of business applications on complex systems. General experience in information systems design and management with requirements that are moderately complex to analyze, plan, program, and implement.

Software Systems Engineer-Senior

Education and General Experience: Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related discipline with eight years experience. **Functional Responsibility:** Provides technical direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Makes recommendations, if needed, for approval of major

systems installations. Prepares milestone status reports and deliveries/presentations on the system concept.

Subject Matter Expert-Junior

Education and General Experience: Bachelor's degree in engineering, computer science, or a mathematics-intensive discipline that provides substantial knowledge and skill in engineering large, complex projects. **Functional Responsibility:** Provides technical knowledge and skill in using specialized applications. Experienced in the operational environment and using high-level functional systems analysis, design, integration, documentation, and implementation methodologies on complex problems which require in-depth knowledge of the subject matter. Applies principles, methods and knowledge of the functional area of expertise and in the process uses advanced mathematical principles and methods to arrive at practical, innovative solutions.

Subject Matter Expert-Intermediate

Education and General Experience: Bachelor's degree in engineering, computer science, or a mathematics-intensive discipline that provides substantial knowledge and skill in engineering large, complex projects with six to nine years of intensive and progressive experience. **Functional Responsibility:** Provides technical knowledge and skill in using specialized applications. Experienced in the operational environment and using high-level functional systems analysis, design, integration, documentation, and implementation methodologies on complex problems which require in-depth knowledge of the subject matter. Applies principles, methods and knowledge of the functional area and in the process uses advanced mathematical principles and methods to arrive at practical, innovative solutions.

Subject Matter Expert-Senior

Education and General Experience: Bachelor's degree in engineering, computer science, or a mathematics-intensive discipline that provides substantial knowledge and skill in engineering large, complex projects with ten to fifteen years of intensive and progressive experience. **Functional Responsibility:** Provides technical knowledge and skill in using specialized applications. Experienced in the operational environment and using high-level functional systems analysis, design, integration, documentation, and implementation methodologies on complex problems which require in-depth knowledge of the subject matter. Applies principles, methods and knowledge of the functional area and in the process uses advanced mathematical principles and methods to arrive at practical, innovative solutions.

Systems Engineer-Junior

Education and General Experience: Bachelor's degree with two years experience. **Functional Responsibility:** Assists with the design and implementation of IT systems to meet business needs. May assist with the development of code, testing and implementing computer programs and subsystems utilizing multiple programming languages. May assist with the leadership role in subsystem design and participates in system design projects. May interface with customers to define system requirements and priorities. Analyzes, resolves or assists in resolving production problems. Assist with the support of business studies and feasibility studies.

Systems Engineer-Intermediate

Education and General Experience: Bachelor's degree with five years experience. **Functional Responsibility:** Designs and implements IT systems to meet business needs.

May develop code, test and implement computer programs and subsystems utilizing multiple programming languages. May lead subsystem design and participates in system design projects. May interface with customers to define system requirements and priorities. Analyzes, resolves or assists in resolving production problems. May lead or support business studies and feasibility studies.

Systems Engineer-Senior

Education and General Experience: Bachelor's degree with seven years experience.

Functional Responsibility: Designs and implements IT systems to meet business needs. May develop code, test and implement computer programs and subsystems utilizing multiple programming languages. May lead subsystem design and participates in system design projects. May interface with customers to define system requirements and priorities. Analyzes, resolves or assists in resolving production problems. May lead or support business studies and feasibility studies.

Telecom Technician

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Responsible for moderately complex tasks typically relating to network monitoring, operations, installation, and/or maintenance.

Telecommunication Engineer / Analyst-Junior

Education and General Experience: Bachelor's degree with two years experience.

Functional Responsibility: Responsible for providing support to more experienced engineers/analyst positions in one or more technical areas within the telecom function.

Telecommunication Engineer / Analyst-Intermediate

Education and General Experience: Bachelor's degree with three to five years experience. **Functional Responsibility:** Responsible for moderately complex engineering and/or analytical activities associated with one or more technical areas within the telecom function (such as, but not limited to, network design, engineering, implementation, or operations/user support).

Telecommunication Engineer / Analyst-Senior

Education and General Experience: Bachelor's degree with six to nine years experience. **Functional Responsibility:** Responsible for complex engineering and/or analytical tasks and activities associated with one or more technical areas within the telecom function such as, but not limited to, network design, engineering, implementation, or operations/user support.

Training Specialist

Education and General Experience: Bachelor's degree with three years experience.

Functional Responsibility: Conducts the research necessary to develop and revise training courses. Prepares instructor materials. Prepares student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars.

Voice Communications Technical-Junior

Education and General Experience: Bachelor's degree with two to four years of experience. **Functional Responsibility:** Monitors and responds to complex technical control facility hardware and software problems. Interfaces with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance. Maintains PBX/systems and associated hardware.

Voice Communications Technical-Intermediate

Education and General Experience: Bachelor's degree with four years of experience.

Functional Responsibility: Monitors and responds to complex technical control facility hardware and software problems. Interfaces with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance. Maintains PBX/systems and associated hardware.

Voice Communications Technical-Senior

Education and General Experience: Bachelor's degree with six years of experience.

Functional Responsibility: Monitors and responds to complex technical control facility hardware and software problems. Interfaces with vendor support service groups to ensure proper escalation during outages or periods of degraded system performance. Maintains PBX/systems and associated hardware.

Web Designer

Education and General Experience: Associate's degree with three years experience.

Functional Responsibility: Develops web page content based on interviews and other data provided; utilizes web page authoring system(s) to create layouts and coding.

Applies HTML, JavaScript, ActiveX and other state-of-the art tools to create dynamic web page designs.

Web Software Developer-Junior

Education and General Experience: AA degree and 3 year experience with programming Java, JSP and XHTML. **Functional Responsibility:** Assist with the designs, development, troubleshooting, debugging, and implementation of software code using the following web development components: Java, JSP and XHTML with heavy reliance on JavaScript code for DHTML interfaces. Frequent use and application of technical standards, principles, theories, concepts, and techniques. Assist with providing solutions to a variety of technical problems of moderate scope and complexity.

Web Software Developer-Intermediate

Education and General Experience: BS and 1 year experience with programming Java, JSP and XHTML. **Functional Responsibility:** Designs, develops, troubleshoots, debugs, and implements software code using the following web development components: Java, JSP and XHTML with heavy reliance on JavaScript code for DHTML interfaces. Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity.

Web Software Developer-Senior

Education and General Experience: BS and 5 years experience with programming Java, JSP and XHTML. Experience working in a CMMI level 5 program. **Functional Responsibility:** Designs, develops, troubleshoots, debugs, and implements software code using the following web development components: Java, JSP and XHTML with heavy reliance on JavaScript code for DHTML interfaces. Frequent use and application of technical standards, principles, theories, concepts, and techniques. Provides solutions to a variety of technical problems of moderate scope and complexity. Follows established procedures for a SE CMMI Level 5 program. Must contribute to the completion of milestones associated with specific projects.